CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 85-82
NPDES NO. CA0037788

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

CITY OF BURLINGAME,
NORTH BAYSIDE SYSTEM UNIT,
SAN MATEO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. The City of Burlingame (hereinafter discharger) by application dated February 10, 1984 has applied for reissuance and amendment of waste discharge requirements under the National Pollutant Discharge Elimination System, NPDES Permit No. CA0037788. The North Bayside System Unit (NBSU) is the joint powers authority responsible for operation of common transport, treatment, and disposal facilities. The NBSU includes the cities of Millbrae, Burlingame, South San Francisco, San Bruno, along with San Francisco International Airport, and Calgon Corporation.

2. The discharger presently discharges an average dry weather flow of 3.3 million gallons per day (mgd) from its recently expanded secondary treatment facility at 1103 Airport Boulevard, Burlingame. Treatment facilities consist of primary sedimentation, secondary treatment (activated sludge), secondary clarification, chlorination and dechlorination. The facility has an estimated dry weather design capacity of 5.5 mgd. This facility treats domestic and commercial wastewater from the City of Burlingame, Town of Hillsborough, and the County of San Mateo. The treated wastewater is discharged from the NBSU force main and outfall into lower San Francisco Bay, a water of the State and United States, northeast of Point San Bruno through a submerged diffuser about 5300 feet offshore at a depth of 20 feet below mean lower low water (37deg 39min 55sec N latitude and 122deg 21min 41sec W longitude). Dewatered sludge from the wastewater treatment processes is normally disposed of at a sanitary landfill. Digested undewatered sludge may occasionally be stored on-site in lagoons.

3. This discharge is presently governed by Waste Discharge Requirements No. (NPDES Permit) 79-20, which allow discharge into San Francisco Bay. This Order reissues the Discharge Requirements.

4. The Regional Board adopted a revised Water Quality Control Plan for San Francisco Bay Region (Basin Plan) on July 21, 1982. The Basin Plan contains water quality objectives for Lower San Francisco Bay and contiguous waters.

5. The beneficial uses of Lower San Francisco Bay and contiguous water bodies are:

    - o Water contact recreation
    - o Non-contact water recreation
    - o Wildlife Habitat

- o Preservation of Rare and Endangered Species
- o Estuarine Habitat
- o Fish migration and spawning
- o Industrial service supply
- o Shellfish harvesting
- o Navigation
- o Commercial and Sport Fishing

6. During wet weather, storm drains, creeks, lagoons, and surface runoff contribute large amounts of contaminants to Burlingame's shoreline areas. Receiving water studies in the vicinity of the Burlingame treatment plant have shown that receiving water coliform limits were frequently violated due to the presence of these large volumes of contaminated runoff.

7. Protection of the most restricted beneficial use in the vicinity of the treatment plant (shellfish harvesting) will not often be possible during wet weather unless significant resources are devoted to improved control and/or treatment of contaminated runoff. Shellfish beds in this area are not legally open for recreational harvesting during wet weather because of the lack of progress to date in controlling non-point sources of pollution. Until such improvements are achieved, the quality of water overlying the shellfish beds during wet weather will most often be controlled by the amount and type of runoff present.

8. During wet weather, raw sewage overflows and bypasses may occur when sewer system and pump station capacity is exceeded as a result of excessive infiltration or inflow of rainfall or rainfall runoff. Bypassing of primary effluent to an emergency nearshore outfall (37deg 35min 32sec N latitude and 122deg 21min 15sec W longitude) may also occur during wet weather due to inadequate hydraulic and treatment capacity at the plant.

9. Cleanup and Abatement Order No. 81-003 was issued to the discharger February 27, 1981 for overflows of raw sewage to city streets and storm drains and partial bypassing of secondary treatment. Pump station and collection system deficiencies and excessive infiltration and inflow are responsible for most of these bypass and overflow incidents. Order No. 81-003 required completion of a Sewer System Evaluation Study (SSES) by April 1, 1982 and implementation of appropriate corrective actions beginning April 1, 1983.

10. The Clean Water Grant funded SSES consisted of gross flow monitoring in November and December 1981, intensive flow monitoring in March 1982, and smoke testing, inspections, and televising March through August 1983. A draft report was submitted October 1983 and a follow-up report April 1984. Most recommended improvements have yet to be implemented.

11. Burlingame began work on a Wastewater Management Facilities Master Plan in late 1982 to identify sewerage system improvements necessary to comply with NPDES permit conditions. The draft Master Plan was essentially complete by September 1983 except for an implementation schedule submitted April 1984. All planning level studies (SSES, Master Plan, EIR, revenue program, and financial plan) were to have been completed by Fall 1984. To date none of the studies have been finalized.

12. The discharger is on the Clean Water Grant priority list for 1986 funding to correct certain wet weather collection system and treatment plant problems. Funding is not possible until all planning studies and design work are completed. Burlingame has been unwilling to proceed on certain

major and potentially fundable projects with local funds since doing so would comprise grant eligibility.

13. At its August 15, 1984 meeting the Board adopted Resolution No. 84-11 implementing the California Compliance Policy and requiring the discharger to submit a Municipal Compliance Plan (MCP) by June 1985 to meet NPDES Permit requirements as soon as possible but not later than the statutory deadline of July 1, 1988. A final Wet Weather MCP was submitted by the discharger June 4, 1985. Proposed Phase II improvements will bring the discharger into wet weather compliance for up to a five to ten year storm event. Subsequent Phase III improvements will provide additional capacity and reliability to accomodate at least a twenty year storm event.

14. The Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) contains the Board's recommended approach to controlling the seasonal degradation of water quality which results from wet weather overflows of wastewater from collection, conveyance, and treatment facilities. This Wet Weather Maintenance Level Approach allows for exceptions to the Basin Plan discharge prohibitions for wet weather discharges where an inordinate burden would be placed on the discharger relative to beneficial uses protected and an equivalent level of environmental protection could be achieved by alternate means.

15. The Board's Maintenance Level Approach has not been implemented because of apparent conflicts with federal regulations. Modifications to the EPA definition of secondary treatment and/or to the federal Clean Water Act are necessary, according to EPA, before the Maintenance Level Approach can be used in NPDES permits for regulating wet weather discharges. EPA contends that secondary treatment is required for all discharges from treatment and collection systems except under certain life or property threatening conditions as defined in federal regulations. Extreme wet weather flows in excess of peak design capacity can cause severe property damage and impair treatment process integrity.

16. The discharger has submitted an application for a waiver of secondary treatment requirements (during periods of wet weather) in accordance with Section 301(h) of the 1981 Amendments to the Clean Water Act. Additional information is needed on the magnitude and frequency of excessive wet weather flows, overflows, and bypasses; on the wet weather capacities of the treatment plant, pump stations, and collection system; and on receiving water impacts of intermittent discharges of less than secondary effluent in order to evaluate the discharger's application. Proposed amendments to the Clean Water Act in 1985 may also eliminate the eligibility of estuarine dischargers (such as Burlingame) for 301(h) waivers. Estuarine 301(h) applications are not being processed at this time until the Clean Water Act amendments are finalized.

17. An Operations and Maintenance Manual is maintained by the discharger for purposes of providing plant and regulatory personnel with a source of information describing all equipment, facilities, and recommended operating strategies, process control monitoring, and maintenance activities necessary to assure consistent compliance and/or minimize non-compliance and upsets. In order to remain a useful and relevant document, this manual should be kept updated to reflect significant changes in plant facilities or activities.

18. The discharger has an EPA approved Local Pretreatment Program for source control and application of pretreatment standards.

19. This Order serves as an NPDES Permit, reissuance of which is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.

20. The discharger and interested agencies and persons have been notified of the Board's intent to reissue requirements for the existing and proposed discharges and have been provided with the opportunity for a public hearing and the opportunity to submit their written views and recommendations.

21. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the discharger in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act as amended and regulations and guidelines adopted thereunder shall comply with the following:

A. Discharge Prohibitions:

1. Bypass or overflow of untreated or partially treated wastewater to waters of the State either at the treatment plant or from any of the collection system and pump stations tributary to the treatment plant is prohibited.

2. Discharge at any point at which the wastewater does not receive an initial dilution of at least 10 to 1 is prohibited except as provided in Prohibition 3.

3. Discharge to the emergency outfall is prohibited except during extreme wet weather events when the maximum hydraulic capacity of the Burlingame to Millbrae section of the NBSU force main is exceeded and/or the requirements of Provision E.17 are met. Only fully treated secondary effluent in excess of the force main capacity shall be discharged during such events.

4. The average dry weather flow shall not exceed 5.5 mgd. The average shall be determined over three consecutive dry weather months (July to September) each year.

B. Effluent Limitations for Discharge into the NBSU Forcemain-Outfall:

1. The discharge of an effluent containing constituents in excess of the following limits is prohibited:

Constituent		Units	Monthly Average	Weekly Average	Maximum Daily	Instantaneous Maximum
a.	BOD_5 or	mg/l	30	45	60	-
	$CBOD_5$	mg/l	25	40	50	-
b.	Total Suspended Solids	mg/l	30	45	60	-
c.	Oil & Grease	mg/l	10	-	20	-
d.	Settleable Matter	ml/l-hr	0.1	-	-	0.2
e.	Total Chlorine Residual (1)	mg/l	-	-	-	0.0

(1) Requirement defined as below the limit of detection in standard test methods. Compliance with this limitation will normally be demonstrated at the NBSU joint dechlorination facility.

2. The pH of the discharge shall not exceed 9.0 nor be less than 6.0.

3. The survival of test organisms acceptable to the Executive Officer in 96-hour bioassays of the effluent shall achieve a 90 percentile value of not less than 50% survival based on the ten most recent consecutive samples. Samples may be dechlorinated in the laboratory prior to testing to provide a chlorine residual equal to that of the waste as discharged from the NBSU joint dechlorination facility.

4. Representative samples of the effluent shall not exceed the following limits for the measurement period indicated [a]:

Constituent	Unit of Measurement	6 Month Median	Daily Maximum
Arsenic	mg/l	0.01	0.02
Cadmium	mg/l	0.02	0.03
Total Chromium	mg/l	0.005	0.01
Copper	mg/l	0.2	0.3
Lead	mg/l	0.1	0.2
Mercury	mg/l	0.001	0.002
Nickel	mg/l	0.1	0.2
Silver	mg/l	0.02	0.04
Zinc	mg/l	0.3	0.5
Cyanide	mg/l	0.1	0.2
Phenolic Compounds	mg/l	0.5	1.0
Total Identifiable Chlorinated Hydrocarbons [b]	mg/l	0.002	0.004

Notes for Effluent Limitation B.4.:

[a.] These limits are intended to be achieved through secondary treatment, source control and application of pretreatment standards.

[b.] Total Identifiable Chlorinated Hydrocarbons shall be measured by summing the individual concentrations of DDT, DDD, DDE, aldrin, BHC, chlordane, endrin, heptachlor, lindane, dieldrin, polychlorinated biphenyls, and other identifiable chlorinated hydrocarbons.

5. The arithmetic mean of values for BOD and Suspended Solids in effluent samples collected in a period of 30 consecutive days shall not exceed 15 percent of the arithmetic mean of respective values for influent samples collected at approximately the same times during the same period (i.e. 85 percent removal).

6. During the months of May through September effluent shall not exceed a median MPN for Total Coliform Organisms of 23/100 ml nor a maximum of 240/100 ml, as determined from the results of the previous consecutive five (5) days for which analyses have been completed.

During the wet weather months of October through April inclusive, effluent shall not exceed a five sample moving median of 240 MPN/100 ml nor a single sample maximum of 2400 MPN/100 ml.

C. Receiving Water Limitations:

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:

   a. Floating, suspended, or deposited macroscopic particulate matter, or foam;

   b. Bottom deposits or aquatic growths;

   c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

   d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;

   e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge of waste shall not cause the following limits to be exceeded in waters of the state in any place within one foot of the water surface:

a.	Dissolved oxygen	5.0 mg/l minimum. Median of any three consecutive months shall not be less than 80% saturation. When natural factors cause lesser concentrations than those above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
b.	Dissolved sulfide	0.1 mg/l maximum
c.	pH	Variation from natural ambient pH by more than 0.5 pH units.
d.	Un-ionized ammonia	0.025 mg/l as N Annual Median 0.4 mg/l as N Maximum

3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Land Disposal Requirements:

1. The discharge of sewage sludge shall not cause waste material to be in any position where it is, or can be, carried from the Land Disposal Site and deposited in waters of the State.

2. The Land Disposal Site shall have facilities adequate to divert surface runoff from adjacent areas, to protect boundaries of the site from erosion, and to prevent any conditions that would cause drainage from the materials in the disposal site. Adequate protection is defined as protected from at least a 100-year storm and from the highest tidal stage that may occur.

3. Discharge to the Land Disposal Site holding ponds of sewage sludge other than that produced as a result of the operation of the discharger's wastewater treatment facilities is prohibited.

4. The Board intends at a later date to amend and/or revoke and reissue this part of these requirements to comply with the current California Administrative Code requirements. (Title 23, Chapter 3, Subchapter 15)

E. Provisions:

1. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 79-20. Order No. 79-20 is hereby rescinded.

2. Where effluent concentration limits in mg/l are contained in this permit, the following mass emission limitations shall also apply as follows:

   Mass Emission Limit in (lbs/day), (kg/day) = Concentration limit in mg/l x (8.34), (3.79) x Actual Flow in mgd averaged over the time interval to which the limit applies.

3. The discharger shall comply with all sections of this Order immediately upon adoption.

4. The discharger shall review and update his Operations and Maintenance Manual annually, or in the event of significant facility or process changes, shortly after such changes have occurred. Annual revisions, or letters stating that no changes are needed shall be submitted to the Regional Board by April 15 of each year beginning 1986. A time schedule for completion of the initial revision shall be submitted by July 1, 1985. Documentation of operator input and review shall accompany each annual update.

5. The discharger shall review and update by July 1, 1985 and annually by April 15 thereafter its contingency plan as required by Board Resolution No. 74-10. The discharge of pollutants in violation of this Order where the discharger has failed to develop and/or implement a contingency plan will be basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.

6. The discharger shall implement its approved industrial Pretreatment Program in accordance with legal authorities, policies, and procedures described in its pretreatment document and in accordance with Order No. 84-60, the federal Clean Water Act (Section 402(b)(8) and (9)), and federal pretreatment regulations in 40 CFR 403.

7. The discharger shall comply with the attached self-monitoring program as adopted by the Board and as may be amended by the Executive Officer. Whenever the discharge is known or suspected to be in

violation of effluent limits, the discharger shall promptly acccelerate its monitoring program to at least daily for those constituents in violation. Such daily analyses shall continue until such time as the effluent limits have been attained, or until such time as the Executive Officer determines to be appropriate.

The Regional Board through the Aquatic Habitat Program, is currently evaluating appropriate bioassay methods for wastewater dischargers within San Francisco Bay. Once methods have been recommended for use in a regulatory monitoring program and approved by the Board, the self-monitoring program may be modified to implement appropriate bioassay methods.

The U.S. Environmental Protection Agency has developed a policy for the Development of Water Quality Based Permit Limitations for Toxic Pollutants. This permit may be modified or reissued to implement this policy.

8. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977. Item C.2. of the Standard Provisions shall be amended to read as follows:

> "The 30 day (monthly) average discharge is the total discharge by weight during a 30 consecutive day (month) period, respectively, divided by the number of days in the period that the facility was discharging. Where less than daily sampling is required by this permit, the 30-day (month) average discharge shall be determined by the summation of all the measured discharges by weight divided by the number of days during the 30 consecutive calendar day period (month) when the measurements were made. For other than 30-day (month) periods, compliance shall be based upon the average of all measurements made during the specified period."

9. Production and use of reclaimed water is subject to the approval of the Board. Production and use of reclaimed water shall be in conformance with reclamation criteria established in Chapter 3, Title 22, of the California Administrative Code and Chapter 7, Division 7, of the California Water Code. An engineering report pursuant to Section 60323, Title 22, of the California Administrative Code is required and a waiver or water reclamation requirements from the Board is required before reclaimed water is supplied for any use, or to any user, not specifically identified and approved in this Order.

10. The discharger shall implement wet weather conveyance and treatment improvements according to the following schedule:

Task	Completion Date
a. Begin Sewer System Rehabilitation Projects Identified as Phase II in the Final Municipal Compliance Plan (MCP)	July 1, 1985
b. Begin Design of Phase II and III facilities identified in MCP as Essential for Correcting Wet Weather Bypasses and Overflows	Aug. 1, 1985

Task	Completion Date
c. Submit Interim Operational and Corrective Action Plan for Minimizing Frequency and Magnitude of Bypasses and Overflows and for Maximizing Wet Weather Effluent Quality	Sept. 1, 1985
d. Install Increased Disinfection and Primary Effluent Pumping Capacity, Pump Station Alarms, and Emergency Power Connections	Dec. 1, 1985
e. Complete Plans and Specifications for Phase II and III Improvements and Submit to State Board Staff for Review	June 1, 1986
f. Advertise for Construction Bids for Phase III Treatment Plant Improvements	Jan. 15, 1987
g. Begin Construction of Phase III Treatment Plant and Main Pump Station Improvements	May 1, 1987
h. Full Compliance	July 1, 1988
i. Submit Annual Progress Reports Quantifying Sewerage System Improvements and Their Impacts on Compliance, Wet Weather Flow Quantity, Overflow/Bypass Frequency, and Summarizing Actions for Coming Year	July 1 (each year from 1985 until full compliance achieved)

Nothing in this schedule shall eliminate the need for compliance with secondary treatment for all discharges.

11. The discharger shall submit to the Board each January, April, July, and October 15th, beginning July 15, 1985, a comprehensive report under penalty of perjury, on the progress toward compliance with each task of this Order. If noncompliance is being reported, the reasons for such noncompliance shall be stated, including the corrective actions taken and an estimate of the date when the discharger will return to compliance.

12. The schedules in Provision E.10 contain the latest dates that the discharger may comply with said tasks. The discharger will accelerate subsequent actions accordingly if certain tasks or grant approvals occur sooner than anticipated in the schedules.

13. The discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with this Order and permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. All of these procedures shall be described in an Operation and Maintenance Manual. The discharger shall keep in a state of readiness all systems necessary, at any time to achieve compliance with the conditions of this Order and permit. All systems, both those in service and reserve, shall be inspected and maintained on a regular basis. Records shall be kept of the tests and made available to the regulatory agencies.

14. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility whose operation is necessary to maintain compliance with the terms and conditions of this Order and permit.

15. "Blending" means the intentional mixing of primary effluent with secondary effluent prior to chlorination, dechlorination, and discharge during extreme wet weather flow events.

16. "Overflow" means the intentional or unintentional diversion of flow from the collection and transport systems, including pumping facilities.

17. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a "bypass" or "overflow".

18. Any "overflow" or "bypass" of facilities, including the wastewater collection system, is prohibited, except:

    a. When "overflow" or "bypass" is unavoidable to prevent loss of life, personal injury, or "severe property damage";

    b. When excessive storm drainage or runoff would cause severe property damage to any facilities necessary for compliance with the effluent limitations and prohibitions of this Order and permit; and

    c. Where there is no feasible alternative to the "overflow" or "bypass", such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment down time. (This conditions is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent an "overflow" or "bypasss" which could occur during normal periods of equipment down time or preventative maintenance); and

    d. Where the discharger has submitted notices as required under Provision E.23 of this Order.

19. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with effluent limitations in the Order and permit because of factors beyond the reasonable control of the discharger. It does not include noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, careless or improper operation, or those problems the discharger should have foreseen.

20. "Upsets" may be caused by attempting to convey extreme wet weather flows in excess of peak design capacity through treatment facilities, particularly biological secondary sytems. Controlled selective "bypassing" of primary effluent around a biological secondary treatment system may be necessary under these conditions to protect long-term secondary treatment capability (i.e. avoid washout).

21. Controlled selective "blending" of primary and secondary effluents can be expected to produce the highest overall effluent quality and the minimum mass of pollutants discharged when wet weather flows in excess of the peak design capacity of the secondary system are experienced.

22. A discharger seeking to establish the occurrence of an "upset" has the burden of proof. A discharger who wishes to establish the affirmative defense of "upset" shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

    a. An "upset" occurred and that the discharger can identify the cause(s) of the "upset;

    b. The permitted facility was, at the time of "upset", being properly operated;

    c. The discharger submitted notice of "upset" as specified in Provision E.23; and

    d. The discharger took all reasonable steps to minimize or prevent any discharge in violation of this Order and permit which had a reasonable likelihood of adversely affecting human health or the environment, including such accelerated or additonal monitoring as necessary to determine the nature and impact of the violation.

23. Any noncompliance that may endanger health or the environment shall be reported verbally immediately, and in no case later that 24 hours from the time the discharger becomes aware of the noncompliance, to the Regional Board at (415) 464-1255. Unless waived by the Executive Officer, a written report shall be submitted within five days of awareness of noncompliance and shall contain a description of the noncompliance anad its cause; the period of noncompliance (including exact dates and times) or anticipated duration; and steps taken or planned to reduce, eliminate, and prevent recurrence of the concompliance. This provision includes but is not limited to:

    a. Violation of a discharge prohibition;

    b. Any "upset", "overflow", or unanticipated "bypass" that exceeds an effluent limitation; and

    c. Violation of a maximum daily discharge limitation for any toxic pollutant or hazardous substance.

24. Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained in this Order and permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both.

25. Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order and permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more that six months per violation, or by both.

26. Any person who causes a violation of any condition in this Order and permit is subject to a civil penalty pursuant to Water Code Section 13385. Any person who willfully or negligently causes a violation of any condition in this Order and permit is subject to penalties pursuant to Water Code Section 13387.

27. This Order expires June 19, 1990. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.

28. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on June 19, 1985.

ROGER B. JAMES
Executive Officer

Attachments:
Standard Provisions & Reporting Requirements, April 1977
Self-Monitoring Program
Resolution No. 74-10

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

City of Burlingame

North Bayside System Unit

San Mateo County

NPDES NO. CA0037788

ORDER NO. 85-82

CONSISTS OF

PART A, dated January 1978

AND

PART B

PART B

CITY OF BURLINGAME AND NORTH BAYSIDE SYSTEM UNIT

I. DESCRIPTION OF SAMPLING STATIONS

A. INFLUENT AND INTAKE

Station	Description
A-001	At any point in the treatment facilities headworks at which all waste tributary to the system is present, preceding any phase of treatment, and exclusive of any return flows or process sidestreams.

B. EFFLUENT

Station	Description
E-001-D	At any point in the plant after disinfection between the point of discharge into the combined outfall and the point at which all waste from the treatment plant is present.
E-002	At any point in the combined outfall after dechlorination between the point of discharge into San Francisco Bay and the point at which all waste tributary to that combined outfall is present.

C. RECEIVING WATER

Station	Description
C-1	At any point in San Francisco Bay located over the geometric center of the outfall's discharge ports.
C-2	At a point in San Francisco Bay located midway between C-1 and C-3.
C-3	At a point in San Francisco Bay located in the center of the waste plume.
C-50-SW	At a point in San Francisco Bay, located 50 feet southwesterly, along the outfall line shoreward from Station C-1.
C-50-NW	At a point in San Francisco Bay, located 50 feet northwesterly from Station C-1, normal to the outfall line.
C-50-NE	At a point in San Francisco Bay located 50 feet northeasterly from Station C-1, along the outfall line extended.

C-50-SE	At a point in San Francisco Bay located 50 feet southeasterly from Station C-1, normal to the outfall.
C-300-N thru C-300-NW (8 stations)	At a point in San Francisco Bay located on a 300 foot radius from the geometric center of the outfall diffuser, at equidistant intervals, with Station C-300-SW located shoreward from Station C-1 at the outfall line.
C-R-NW	At a point in San Francisco Bay located approximately 1500 feet northerly from the point of discharge.
C-R-SE	At a point in San Francisco Bay, located approximately 1500 feet southeasterly from the point of discharge.

D. LAND OBSERVATIONS

Station	Description
P-1 thru P-'n'	Located along the periphery of the waste treatment or disposal facilities, at equidistant intervals, not to exceed 100 feet. (A sketch showing the locations of these stations will accompany each report.)

E. OVERFLOWS AND BYPASSES

Station	Description
OV-1 thru OV-'n'	Bypass or overflows from manholes, pump stations, or collection system.

NOTE: Initial SMP report to include map and description of each known bypass or overflow location, and report on pump station alarms, pumping capacity, upstream storage capacity and bypass location.

Reporting - Shall be submitted monthly and include date, time, and period of each overflow or bypass and measures taken or planned to prevent future occurrences (see Part A Section F.2.).

II. SCHEDULE OF SAMPLING AND ANALYSIS

A. The schedule of sampling and analysis shall be that given as Table I.

I, Roger B. James, Executive Officer, do hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 85-82.

2. Is effective on the date shown below.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions will be ordered by the Executive Officer.

Roger B. James
ROGER B. JAMES
Executive Officer

Effective Date June 27, 1985

Attachments:
Table I and Legend For Table

TABLE 1

ORDER NO. SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	A-001	E-001-D			E-002			All C Sta.	All P Sta.
TYPE OF SAMPLE	C-24	4) G	4) C-24	Cont	4) G	5/ C-24	Cont	10) G	0
Flow Rate (mgd)				D			D		
BOD_5, $CBOD_5$, or COD (mg/l & kg/day)	2/W		3/W			5/W			
Chlorine Residual & Dosage (mg/l & kg/day)		2H	or	8) Cont	2H	or	8) Cont		
Settleable Matter (ml/l-hr. & cu. m/day)		D			D				
Total Suspended Matter (mg/l & kg/day)	2/W		D			5/W			
Oil and Grease (mg/l & kg/day)	2) 2/M	2/ 2/M			2/ 2/M				
Coliform (Total or Fecal) (MPN/100 ml) per req't		3/W			5/W			3/ M	
Fish Tox'y 96-hr. TL_{50} or %Surv'l in undiluted waste			6) M			5/ M			
Total and Un-ionized NH_3-N (mg/l & kg/day)			9) M			9) M			
Nitrate Nitrogen (mg/l & kg/day)						9) M			
Nitrite Nitrogen (mg/l & kg/day)						9) M			
Total Organic Nitrogen (mg/l & kg/day)									
Total Phosphate (mg/l & kg/day)									
Turbidity (NTU)			D			M		M	
pH (units)		D			D			M	
Dissolved Oxygen (mg/l and % Saturation)		D			D			M	
Temperature (°C)		D			D			M	
Apparent Color (color units)									
Secchi Disc (inches)								M	
Sulfides (if DO<5.0 mg/l) Total & Dissolved (mg/l)		12) D			12) D			M	
Arsenic (mg/l & kg/day)			7) Q						
Cadmium (mg/l & kg/day)			7) Q						
Chromium, Total (mg/l & kg/day)			7) Q						
Cooper (mg/l & kg/day)			7) Q						
Cyanide (mg/l & kg/day)			7) Q						
Silver (mg/l & kg/day)			7) Q						
Lead (mg/l & kg/day)			7) Q						

TABLE 1 (continued)

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	A-001	E-001			E-002			All C Sta.	All P Sta.	All OV Sta.	
TYPE OF SAMPLE	C-24	G	C-24	Cont	G	C-24	Cont	G	O		
Mercury (mg/l & kg/day)			Q [7]								
Nickel (mg/l & kg/day)			Q [7]								
Zinc (mg/l & kg/day)			Q [7]								
Phenolic Compounds (mg/l & kg/day)			Q [7]								
All Applicable Standard Observations (See Part A, Sec. C.5.)		D			D			M	E	E	
Bottom Sediment Analyses and Observations											
Total Ident. Chlor. Hydrocarbons (mg/l & kg/day)			Q [7]								
Un-ionized Ammonia as N (mg/l)								M			
Dewatered Sludge									D [11]		
Daily Rainfall									D		

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample
C-24 = composite sample - 24-hour
Cont = continuous sampling
O = observation

TYPES OF STATIONS

A = treatment facility influent stations
E = waste effluent stations
C = receiving water stations
P = treatment facilities perimeter stations
OV = overflows and bypasses

FREQUENCY OF SAMPLING

E = each occurence
H = once each hour
D = once each day
W = once each week
M = once each month

2/H = twice per hour
2/W = 2 days per week
5/W = 5 days per week
2/M = 2 days per month
2/Y = once in March and once in September
Q = quarterly, once in March, June, Sept. and December

2H = every 2 hours
2D = every 2 days
2W = every 2 weeks
3M = every 3 months
Cont = continuous

1/ During any day when bypassing occurs from any treatment unit(s) in the plant or to the emergency outfall, the monitoring program for the effluent and any nearshore discharge shall include the following in addition to the above schedule for sampling, measurement and analyses:

1. Composite sample for BOD and Total Suspended Solids.

2. Grab samples for Total Coliform, Settleable Matter and Oil and Grease.

3. Continuous monitoring of flow.

4. Continuous or every two hour monitoring of chlorine residual.

2/ Oil and Grease sampling shall consist of 3 grab samples taken at 8-hour intervals during the sampling day with each grab being collected in a glass container and analyzed separately. Results for stations A-001 and E-001 shall be expressed as a weighted average of the 3 values, based upon the instantaneous flow rates occurring at the time of each grab sample. Results for station E-002 shall be expressed as a simple average of the three values. If the plant is not staffed 24 hours per day or if the discharge does not occur continuously, then the three grab samples may be taken at approximately equal intervals during the period that the plant is staffed or during the period that discharge is made.

The 3 grab samples may be combined and analyzed as a composite sample after submittal of data acceptable to the Executive Officer that the two techniques are equivalent. In the event that sampling for oil and grease once every two weeks or less frequently shows an apparent violation of the waste discharge permit, 30-day average limitation (considering the results of one or two day's sampling as a 30-day average), then the sampling frequency shall be increased to weekly so that a true 30-day average can be computed and compliance can be determined.

3/ 5 samples per station each day at Stations C-1, 2, 3, CR-NW and CR-SE ONLY.

4/ Grab samples shall be taken on day(s) of composite sampling.

5/ Sample date for bioassay and for one of all other specified parameters at E-002 shall coincide with date and times of Calgon Corp. E-001 composite sample.

6/ If a continuous bioassay is to be run, sample may be taken from E-001 prior to disinfection instead of dechlorinating E-001 effluent.

7/ If any sample is in violation of limits, sampling shall be increased for that parameter to weekly until compliance is demonstrated in two successive samples.

8/ Data shall be reported using Form A (attached) or equivalent, chlorine residual analyzers shall be calibrated against grab samples as frequently as necessary to maintain accurate control and reliable operation. If an effluent violation is detected, grab samples shall be taken every 30 minutes until compliance is achieved.

9/ These parameters shall be tested for on the same composite sample used for the bioassy.

10/ Monthly sampling dates and approximate times shall coincide with receiving water monitoring conducted by the City of San Mateo and the South Bayside System Authority.

11/ Daily records shall be kept of the quantity and solids content of dewatered sludge disposed of and the location of disposal.

12/ Sulfides in the effluent are only to be measured if DO less than 2.0 mg/l.